



Common Terrestrial Invasive Species of New York

WHAT ARE INVASIVE SPECIES?

Invasive species are non-native species whose introduction can or is likely to cause harm to the environment, economy, and/or human health. These species can be plants, animals, pests or pathogens.

WHY ARE INVASIVE SPECIES A THREAT?

Invasive species effect nearly every aspect of our world and are one of the greatest threats to New York's biodiversity. The spread of invasive species eventually leads to a reduction in biodiversity, including the loss of native fish, wildlife, plant, and tree species. Invasive species are the greatest threat to endangered plants and animals while also contributing to habitat destruction.

HOW DO INVASIVE SPECIES IMPACT SOCIETY?

Invasive species cost millions of dollars to manage and have devastating consequences on New York State's ecosystems, economy, and human health. Invasive species cause damage to our crops, livestock, and food supply. They have large impacts on our forest industry. Invasive species can cause a decrease in recreational opportunities along with the aesthetic enjoyment of our environment. In rare cases, can cause diseases in humans.

ORIENTAL BITTERSWEET (*Celastrus orbiculatus*)

WOODY VINE



Description: Leaves are rounded with a long pointed tip and are arranged alternately on the stem. Young stems are green and develop into a woody vine as they age. Can reach up to 100 feet in length and 7 inches in diameter. Roots have a distinctive orange color. In the fall, the leaves turn a light yellow color

Flower: Greenish-yellow flowers usually with five petals, found in clusters of 3-7. Bloom in May and June

Fruits: In clusters of 1-3 along the stem, and are bright red

Common Look-alikes: American Bittersweet (native). This species does not grow as quickly or as large as Oriental Bittersweet. American Bittersweet does not flower or produce as much fruit as Oriental Bittersweet. American Bittersweet flowers/fruit are located at the end of the vine



HONEYSUCKLE (*Lonicera* spp.)

SHRUB



Species: Morrow's honeysuckle (*Lonicera morrowii*), Amur honeysuckle (*Lonicera maackii*), Tatarian honeysuckle (*Lonicera tatarica*), and Japanese honeysuckle (*Lonicera japonica*)

Description: Leaves are oval shaped and oppositely arranged. The stem is hollow. Japanese honeysuckle is a woody vine that can reach 30 feet in length, and the other three species are shrubs that can grow from 6 to 15 feet in height

Flowers: Typically, fragrant and yellow, white, or pink with long slender stamens

Fruit: Numerous small red berries are produced in pairs along the stem. Develop in late June

Common Look-alikes: Look-alikes include native bush honeysuckles (*Diervilla* sp.), hairy honeysuckle (*L. hirsuta*), swamp fly-honeysuckle (*L. oblongifolia*) and water-berry (*L. villosa*). Native honeysuckle does not have a hollow stem

JAPANESE BARBERRY (*Berberis thunbergii*)

SHRUB



Description: Leaves are small and shaped like stretched out raindrops, or narrow ovals. They grow in a whorl-like pattern around an axis on the spiny stem. Color can range from green to dark reddish-purple. Deciduous shrub usually grows three to six feet in height. The branches are brown

Flower: Flowers are a pale yellow, appearing along the length of the stem in clusters of two to four. Develop in the spring

Fruit: Red berries which appear in the fall and persisting through the winter in rows along the stem

Common Look-alikes: Invasive, European barberry (*B. vulgaris*), and native, Allegheny barberry (*B. Canadensis*). Japanese Barberry has simple spines, as opposed to 3-pronged spine branches.



COMMON BUCKTHORN (*Rhamnus cathartica*)

LARGE SHRUB/SMALL TREE



Description: Leaves are egg-shaped with prominent leaf veins that curve as they approach the rounded tip. The leaves have a dark green color that are typically lighter on the underside. Leaves arranged alternately, but may appear close to opposite. The large shrub that can grow up to 20 feet high. Small thorns form at the tip of its branches. Young plants have light woody stems with lenticels, horizontal lines, that are lost with age. Older plants have bark that is dark gray to brown in color with an orange interior

Flower: The flowers are small with four sepals and four petals, forming clusters from the axis of leaves or on short twigs along the stem. Flowers in late spring

Fruit: Clusters of purplish-black berries form in August/September

GARLIC MUSTARD (*Alliaria petiolata*)

BIENNIAL HERB



Description: Leaves are scalloped and heart shaped. The leaf stalks of mature Garlic Mustard are hairy, and can grow up to 3.5 feet tall. A garlic-like odor produced from crushing the leaves

Flower: A small, white, 4-petaled flower is produced at the top of the plant. Flowers are produced from April to June

Common Look-alikes: Some plants with similar flowers include the Cut-leaved toothwort (*Cardamine concatenate*), Sweet cicely (*Osmorhiza claytonia* and *O. longistylis*), and Early saxifrage (*Saxifraga virginica*). The basal leaves of the Garlic Mustard may resemble those of the Creeping Charlie (*Glechoma hederacea*), Violets (*Viola spp.*), and Kidney-leaf buttercup (*Ranunculus abortivus*)



MULTIFLORA ROSE (*Rosa multiflora*)

PERENNIAL SHRUB



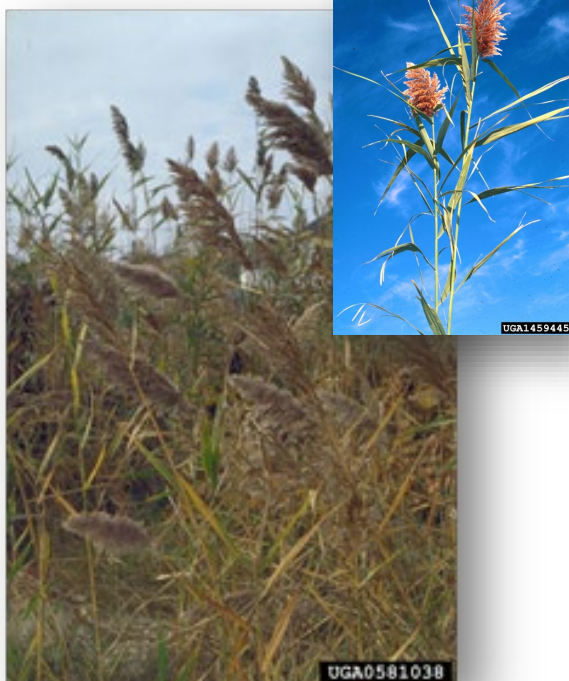
Description: Leaves are compound and grow alternately with an odd number of green, oval, toothed leaflets. These are smooth on the upper side, and have tiny hairs underneath. The plant grows up to 10-15 feet high with a width of about 9-13 feet. Has red to green twigs with recurved thorns

Flowers: Small white/white-pink flowers with 5 petals. Bloom in late May or June

Common Look-alikes: Wild Climbing Rose (*Rosa setigera*) resembles Multiflora Rose, although it has compound leaves with fewer leaflets and pink flowers

COMMON REED (*Phragmites australis*)

PERENNIAL GRASS



Description: Leaf blades are flat, alternate to one another, can grow up to 24 inches long and end in a point. They are a blue/green color with light hairs. It can grow to 13 feet in height and has rigid stems. Often found in inland and estuary wetland areas

Flower: At the end of the stalks there are feathery, loose/dropping flower clusters that are usually tan/brown to purplish that get fluffier with time. Flower in late summer and throughout fall

Common Look-alikes: Native Phragmites are very similar in appearance but the native has been largely displaced. The ligule, knee like segment on stalk, can be used to distinguish the two; it is less than ½ inch for the invasive, and greater than ½ inch for the native species. Other species that look somewhat like younger Phragmites are Bluejoint grass (*Calamagrotis canadensis*) and Prairie Cordgrass (*Spartina pectinata*)



JAPANESE KNOTWEED (*Fallopia japonica*)

HERBACEOUS PERENNIAL



Description: Leaves are broadly ovate with a rounded base and pointed tip. They are arranged alternating on the zig-zag stems and can be 3-6 inches long, often appearing to be slightly heart shaped. The stem is light green, often with reddish flecks. The plant is branched and can grow 9-14 feet in height. During dormancy, the plant appears reddish-orange

Flower: Small, off-white flowers develop in August to September in clusters of 3-6

Common Look-alikes: Giant Knotweed (*Fallopia sachalinensis*) has many similar characteristics to the Japanese Knotweed, although it is typically much larger

MUGWORT (*Artemisia vulgaris*)

AROMATIC PLANT



Description: Leaves are alternately arranged and covered with woolly, silver hairs on the underside with a slight hairiness on the upper leaf side. The stems are longitudinally ridged, with several axillary branches near the upper parts of the plant. As the plant ages, the stem becomes more woody. The plant can grow 2-5 feet in height

Flower: Small (5 mm) green with yellow or dark red petals, growing in clusters occurs from July to late September

Common Look-alikes: Common ragweed (*Ambrosia artemisiifolia*). Can be distinguished by the strong "herbal" odor from crushed Mugwort leaves



PURPLE LOOSESTRIFE (*Lythrum salicaria*)

PERENNIAL FLOWERING PLANT



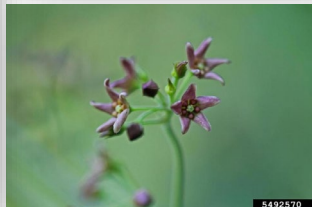
Description: Leaves are 2-6 inches long and oppositely arranged. Leaf pairs typically grow at a 90 degrees angle from one another. Leaves closer to the flowers tend to be more upright. The stems are rigid and lined with lance-shaped leaves. Can reach up to 13 feet tall

Flower: Purple, usually with 5-7 petals, growing in pairs/clusters on 4-16 inch long spikes. Blooms from May to September

Common Look-alikes: Fireweed (*Chamaenerion angustifolium*), Swamp Loosestrife (*Decodon verticillatus*), Winged Loosestrife (*Lythrum alatum*), Blue Vervain (*Verbena hastate*)

PALE / BLACK SWALLOWWORT (*Vincetoxicum rossicum/nigrum*)

VINE



Description: Leaves are oval to heart-shaped with a dark green coloration, usually 2-5 inches in length, and 1-1.25 inches in width, with a pointed tip. The herbaceous, perennial vine that can grow up to 7 feet long

Flower: Small, dark purple and star-like shaped flowers with 5 petals that can grow in clusters of 6-10. Flowers in the early summer

Fruit: A thin pod, which resembles milkweed, contains several flat brown seeds with white fine hairs is produced in late July to early August. The large seeds can be transported long distances by wind

